

APPENDIX B: KELSO DEPOT DEVELOPMENT CONCEPT PLAN

KELSO DEPOT DEVELOPMENT CONCEPT PLAN

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During the planning process for this *Revised Draft Environmental Impact Statement / General Management Plan*, the public, the local Congressional Representative, and the San Bernardino County Board of Supervisors provided overwhelming support for the restoration of the Kelso Depot. The California Desert Protection Act of 1994 authorized the construction of a visitor center in Mojave National Preserve. It is proposed that the Kelso Depot be adaptively rehabilitated to become a museum, field office, and interpretive facility for Mojave. To increase the speed at which this would take place, this development concept plan for the depot is included in this *Revised Draft General Management Plan and Environmental Impact Statement*. The National Park Service uses a development concept plan to bridge the gap between a general management plan and the preliminary construction and design drawings for a specific geographic area within the NPS boundaries. This is accomplished by providing greater detailed direction on options for development at a particular geographic area. Specific details on building and site functions would be prepared in Title 1 (Preliminary Design or Schematic Design) drawings and documents. The following are several design concepts with options for developing the Kelso Depot into a visitor center.

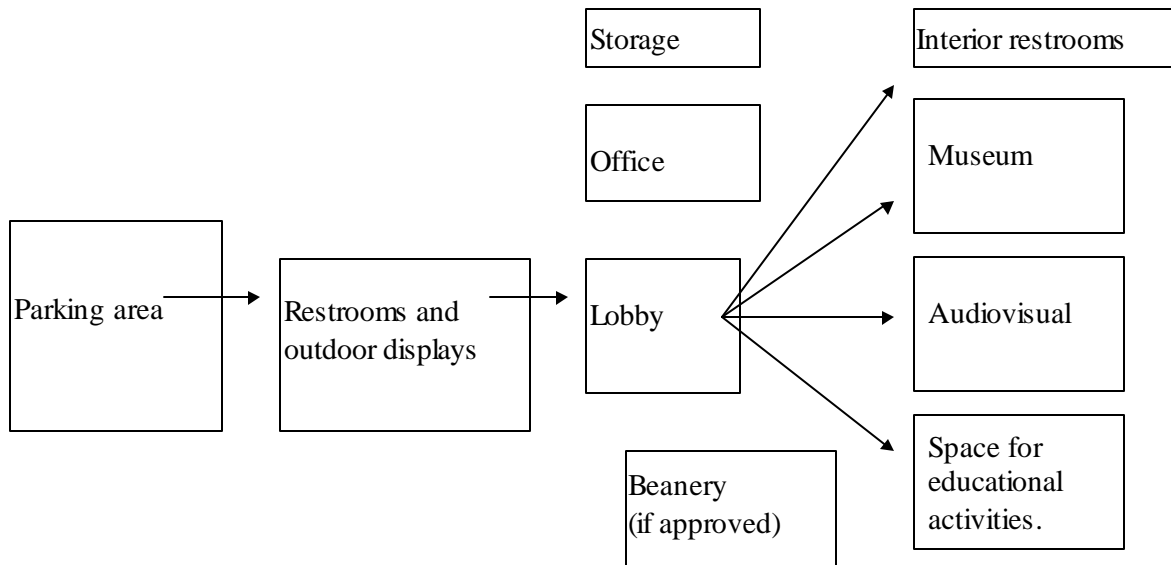
PROPOSED ACTION

See proposed action drawings.

This concept works under the assumption that the Kelso Depot would become a major information and interpretive facility for the Preserve. The visitor center would include a lobby, information space, museum, interpretive displays, audiovisual exhibits, and space for presentations, public restrooms, publication sales, and storage. The building would be modified to provide space for the following additional functions: (1) The Beanery café would be restored with food service as a future option; (2) NPS administrative offices would be established in the depot; (3) Classroom and educational space would be provided for school and other groups. Included at the end of this section are four figures that depict the proposed site plan and the floor layouts for three levels in the depot. A map of existing site conditions is included in the DEIS (figure 14).

SPATIAL RELATIONSHIPS AND PREFERRED FUNCTIONAL SEQUENCE

Visitors would be directed to specified parking lots from which walks would take visitors to a new exterior restroom that would be open 24 hours a day. Tour groups and others could then proceed to an outdoor staging area where visitors could be introduced to the building before entering it. Visitors would then proceed to the lobby where general information would be available. Next, visitors could experience interpretive displays, programs, and a museum. Special groups associated with educational programs would also have the option of being directed to a space for educational activities.



The National Park Service would approach owners of property adjacent to the depot to see if they would be willing to sell or donate their property to the government. If the National Park Service acquires this property, it would allow for the construction of such things as visitor parking, walks, and information centers. The National Park Service is acquiring the historic Kelso Schoolhouse for preservation and interpretation. New structures must fit in with the cultural landscape.

TRAINS AND VISITORS

The future plan would consider solutions to resolve conflicts and safety concerns relating to pedestrians and trains. Because of the public's high interest in existing train operations, the National Park Service would work with Union Pacific to find ways to encourage the public to keep off the tracks and to keep them safe while allowing them to observe train operations (see the section on interpretation for more information). Options that would allow rail passengers to unload off of trains and enter the depot would be considered in future design work. The National Park Service would cooperate with the Union Pacific, Amtrak, and any other parties to find solutions to other common objectives and problems at Kelso.

FLOOD MITIGATION

The gap in the northern dike where the Kelbaker Road currently cuts through may be partially filled in to increase the level of flood protection for the Kelso Depot and Union Pacific housing area. It is also proposed that the dike be reconstructed and armored as needed to strengthen it and face it where appropriate with a material that would protect it against the damaging effects of floodwaters. This dike behind the Kelso Depot is near the Kelso Depot dump. Flash floods have washed material culture from that dump downstream. Any work on the dike should be preceded by archeological salvage of the dump, looking especially for remains of the original Kelso Lunch Room stools and bases, fragments of depot China to prove what types were used in the depot, and any and all other material culture from

the depot. Specific recommendations would be developed by engineers during the development of the design drawings.

See appendix A “Floodplain Statement of Findings” of this Development Concept Plan for more details. A second floodplain study will be conducted during the summer of 2000 to provide specific engineering proposals to mitigate the flood threat. The engineering recommendations from that study will be taken and considered in the final proposal for the depot.

LANDSCAPING

It is proposed that the historic landscape between the tracks and the depot be reconstructed to the period of historic significance. Site amenities such as the concrete light standards, benches, and brick surfaced walks should be reconstructed or restored and placed as close to their original locations as possible. The brick paved walks would be reconstructed where appropriate. A landscape of lawn and trees similar to that which once grew between the building and the tracks would be reestablished with other plantings that represent the time period of significance. Where possible, plants should be drought tolerant while still retaining the form and appearance of the original landscaping. Landscapes surrounding the building to the east, west, and north would have little or no lawn, and would use water conserving plants where possible. One of the two original depot sign posts with original light fixture rests in the depot basement, although the “KELSO” signs once attached to the post are missing. Replicas of the cast metal (probably iron) signs, based on photographs of the Kelso sign and measurements of the original sign at Yermo still in place, will be made, and the sign and signpost restored to one of the two locations where such signs stood within the Depot lawn area.

The National Park Service would also evaluate the feasibility of reestablishing other historic landscapes around the schoolhouse, general store/post office, and other sites at Kelso to help reestablish the historic setting of the old town. The National Park Service could also approach Union Pacific to consider ways in which the view from the depot to the Union Pacific housing area may be improved by removing those things that may distract from the overall setting.

An NPS cultural landscape inventory and assessment process is currently underway. The park will respond to the information that is received and will incorporate it as needed.

INTERPRETATION AND INFORMATION

A site-specific interpretive plan would consider the substance of the interpretive program, exhibits, displays, and nature of the support facilities at Kelso. Items of historic significance used in interpretation work would not be located where they would be threatened by potential flooding.

An unstaffed information kiosk and a restroom (comfort station) would be located near the proposed parking lot to take care of visitor needs when the depot is not open. The architectural character of these and any other proposed structures must complement the visual character of the historic setting of Kelso but also distinguish themselves from the remaining historic buildings. A unifying design theme would be established to tie the entire development proposal together. Signs in the vicinity of the Kelso Depot should be designed to resemble railroad signage in color, style and type of lettering.

If the National Park Service is able to acquire the historic general store/post office and or schoolhouse, it is proposed that these buildings be evaluated separately for potential interpretive and public information purposes unless a higher priority for use could be justified. The level of historic

restoration or treatment of these buildings would be determined after they have been thoroughly evaluated for such things as hazardous materials, structural integrity, and proposed uses.

There is strong public interest in the current railroad activities at Kelso. The interpretive plan would consider the possibility of inviting Union Pacific to a partnership in the creation of an outdoor display area that highlights the historic and current railroad operations at Kelso. Many visitors that stop at the depot have a strong desire to view and photograph current railroad operations. A future plan would need to consider how this visitor activity could be safely accommodated. An additional fence or some type of barrier would need to be constructed between the depot and the tracks. Attention to location of these proposed features would be needed to avoid any conflicts with the historic character of the depot and the historic district.

The remains of the historic iron ore loading area that is located south of the tracks and east of the existing Kelbaker Road would be considered for interpretation to the public in the long-term interpretive plan. A roadside pullout may be constructed along with interpretation displays and a potential viewpoint for photographing and interpreting the depot, the town of Kelso, and Vulcan Mine.

SITE UTILITIES

The National Park Service would construct its own water system since Union Pacific does not wish to be responsible for providing potable water for the depot. The National Park Service would construct its own wastewater treatment system to handle onsite waste. The National Park Service would tie into the existing electrical system and work with the local phone service provider to find a way to improve telephone and data transmission to meet future demands for phone service. Trash, electrical and other above ground utilities would be located on the north side of the building and enclosed where possible to mitigate any visual impacts that they could produce. The historic utility poles located east of the depot along the Kelso-Cima Road would remain as a part of the historic cultural landscape. Proposed water tanks would be placed underground to reduce visual impacts to the setting. Both the tanks and the well would be located on the NPS property east of the historic post office and north of the Kelso-Cima Road.

ROADS AND PARKING

Warning signs and other appropriate devices would be installed near proposed pedestrian crosswalks to warn drivers of the potential for pedestrians ahead on the Kelso-Cima Road.

Railroad crossing arms would be installed at the existing Kelbaker crossing to aid in the control of traffic when trains are present. The National Park Service would work with the County of San Bernardino, Union Pacific and other appropriate funding sources to obtain the crossing arms.

To avoid creating visual distractions that would reduce the historic setting of the depot, the parking lots and other new facilities would be placed as far away from the depot as reasonably possible. Parking would be located to the east of the depot between the Kelso-Cima Road and the tracks (see figure B-1). This will accomplish the goal of a clean historic setting for the building. It would also provide for a good pedestrian approach to the building with the depot and proposed trees visually blocking views of the road intersection and traffic to the north of the building. An estimated 36 parking spaces would be provided. Additional parking may be placed on NPS land that is located on the north side of the road and east of the historic post office if future visitation levels create the need. An estimated 49 parking spaces could be provided in this area. Both parking lots would be surfaced with stabilized earth to reduce costs but to also contribute to feel of the historic setting.

ALTERNATIVE 1

This alternative is the same as the proposed action with the following changes:

This alternative is developed around the basis that the majority of new development would be on existing NPS property and outside of the Union Pacific right-of-way. The existing road system would remain relatively unchanged. All alternatives work is under the assumption that the Kelso Depot would become a major interpretive and visitor information facility for the Preserve.

ROADS AND PARKING

All road alignments would remain relatively unchanged. Some parking would be located on the north side of the depot on both sides of the Kelso-Cima Road. Bus and large vehicles would be accommodated on the north side of the road and smaller vehicles on the south. The majority of the parking would be located east of the historic post office on NPS land. An estimated 74 parking spaces would be provided. Parking surfaces would be stabilized earth.

LANDSCAPING

Trees would be planted to buffer the visual impact of the parking lots proposed north of the depot and east of the historic post office. Trees would be planted along the walk between the east parking lot and the depot to visual tie the two areas together and mediate negative impacts that may be caused to visitors as they walk adjacent to the road. The amount of lawn would be reduced from what is shown in the preferred action with most proposed plantings located on the east side of the building to work with the approach from the east parking lot. Five Joshua trees would be planted to represent a time period during the history of the depot.

INTERPRETATION

The comfort station and unstaffed interpretive displays would be located on NPS property to the northeast of the depot. The National Park Service would seek to develop formal agreements with private property owners where historic structures or features exist at Kelso with the intent of possibly including these features in an interpretive plan.

SITE UTILITIES

There would be no changes with this plan from the proposed action.

FLOOD MITIGATION

Warning systems and dike protection as described in the proposed action would be developed with additional information gained through the proposed flood and engineering study.

ALTERNATIVE 2

This alternative is similar to the proposed action by keeping the same overall development theme with a few adjustments.

ROADS AND PARKING

Parking and access drives will be paved with asphalt as opposed to stabilized earth. A potential 72 parking spaces could be developed for bus, RV, and smaller vehicle use.

LANDSCAPING

More trees will be planted around the parking lot to buffer the visual impact. Additional trees will be planted between the parking lot and the depot to screen the building from the parking lot so that the parking lot is not as visible from the building. The intent is to reduce the negative impacts related to the view of the parking lot while standing in front of the depot. These trees will also serve to shade the staging area where NPS staff could meet prospective visitors and introduce them to the depot. The amount of lawn has been reduced between the tracks and the depot. A circle of brick paving will represent the location of the historic water tower. The intent is to represent the tower and assist in telling the story of the depot.

INTERPRETATION AND INFORMATION

The National Park Service would seek to develop formal agreements with private property owners where historic structures or features exist at Kelso with the intent of possibly including these features in an interpretive plan for the historic district.

SITE UTILITIES

Same as the proposed alternative, but the underground water tanks and wells would be located on NPS property just north of the depot.

ALTERNATIVE 3

This alternative works under the assumption that the National Park Service would work with existing conditions and only pursue actions that would stabilize and increase protection for the depot from fire and earthquakes. The interior of the building would not be rehabilitated for occupation. The National Park Service would only make minor improvements to the exterior of the building and site and allow the public to better appreciate and understand the history of the building. A restroom would be built behind the depot on NPS property to eliminate the portable toilets that are now used by the public.

ROADS AND PARKING

No change to the existing road system. Concrete curbing or another type of curbing would be installed to replace the railroad ties that now serves that purpose of keeping vehicles away from the building. The parking areas would remain as they are.

LANDSCAPING

The National Park Service would continue to do what is needed to keep the palm trees between the depot and the tracks alive. An accessible route for wheel chairs would be defined between key points on the property that could be accessed without major renovations.

INTERPRETATION

Information would be taken from the interpretive planning effort to increase the number of and or improve the interpretive displays that would be placed outside of the building.

SITE UTILITIES

An alarm system may be installed to increase the protection of the building, but this option would need to be studied further to determine if adequate response time by related protection services is present. The restroom may have a small leach field and septic tank.

FLOOD MITIGATION

Same as proposed alternative.

FLOODPLAIN STATEMENT OF FINDINGS

The National Park Service owns the historic Kelso Depot. The depot is one of the significant cultural resources within Mojave National Preserve. Construction on the building was completed in 1925 and served the Union Pacific Railroad by providing housing and meals to employees and meals to the public until it was closed and abandoned in 1985. The architectural integrity of this 2-story building remains relatively intact. The depot contains approximately 11,600 square feet. The depot sits within the town of Kelso that is located within the heart of the Preserve. Kelso contains remnants of other historic structures and a few modern structures that house an estimated 30 residents. The depot property is located just south and east of the junction of the Kelbaker Road and Kelso-Cima roads and north of the Union Pacific railroad tracks.

The *Revised Draft Environmental Impact Statement / General Management Plan* for Mojave National Preserve is recommending that this building be restored to its period of historic significance and adaptively used as a major museum and interpretive facility for Mojave National Preserve. The National Park Service completed a historic structure report in 1998 for the Kelso Depot that provides an analysis of requirements for treatment of a historic resource for preservation and use.

JUSTIFICATION

Because of the historic significance of the Kelso Depot, the National Park Service has requested funding to stabilize and protect this building from further deterioration. Public comments and scoping meetings held during the general management planning process were overwhelmingly in support for restoration of and public use of the depot. The public interest and opportunities for interpreting this historic structure and cultural landscape are high. The San Bernardino County Board of Supervisors formally passed a resolution on February 24, 1998, recommending that the U.S. Department of the Interior fund the stabilization and restoration of the Kelso Depot.

The depot is at a prime location for visitor contact — next to a highway junction that receives visitor traffic from four out of the six major highway entrances. A visitor study conducted in April 1997, and traffic counter data from 1997, indicated that an estimated 90% of all visitors who enter Mojave National Preserve, pass through this highway junction. The depot is about 250 feet from the junction and very visible to travelers. The Preserve has over 1.6 million acres with six primary highway entrances. Locating the visitor center next to the railroad could provide options for an alternative mode of transportation for visitors coming to the Preserve.

Section 512 of the California Desert Protection Act of 1994, calls for the general management plan to “evaluate the feasibility of using the Kelso Depot and existing railroad corridor to provide public access to and a facility for special interpretive, educational, and scientific programs within the Preserve.” The planning effort has evaluated the feasibility of using the depot as a visitor contact center and museum. This proposal is justified by a strong need to restore, protect and interpret this historic structure. This need is driven by strong support from the general public and local county government. The depot is also an excellent location from which to contact visitors. We believe that the combination of these factors provides strong justification for creating a visitor facility within a floodplain, despite the potential threat of flooding. We also believe that the application of recommended mitigation measures can substantially reduce the threat to life or government property.

INVESTIGATION OF ALTERNATIVE SITES

Alternative locations for a visitor contact facilities within the Preserve include: land south of Baker California along the Kelbaker Road, land south of the Nipton road junction on Ivanpah Road, and north of interstate highway 40 on Kelbaker Road. Each location would require construction on previously undisturbed ground and the extension of power and telephone lines for a least 1-mile to each site. This would create a visual intrusion on each open landscape that presently may only have visual intrusions such as the road, a barbed wire fence, or cattle corral to distract from the scenery. Each alternative location would only capture up to 33% of the total, current, traffic flow and require many visitors to drive for over 1 hour to reach the visitor center from the other entrances. There is the possibility of leasing a building within the town of Baker for use as a visitor contact facility. The advantages of this location include the potential for a high number of people that may be attracted off of interstate 15 traffic. There are also easily available public utilities and lower impact on land than may occur at alternative sites. The disadvantages of a Baker site include the fact that it would be off the main flow of visitor traffic and many people may not make the effort to travel to Baker to get information on the Preserve. In 1997 and 1998, visitation data indicate that the natural and cultural features within the Preserve are stronger attractions to visitors than the existing visitor information center in Baker. This situation occurs, despite the fact that the center is frequently advertised on a local radio station.

DESCRIPTION OF SITE SPECIFIC FLOOD RISK

The National Park Service Water Resources Division conducted a floodplain study for the Kelso Depot during the spring of 1998. Results of the study indicate that the elevation of the 100-year flood is below the existing levee elevation. However, the existing levee does not provide adequate long-term protection due to its fine-grained, nonreinforced material, which will undoubtedly fail when subjected to prolonged flooding. With no levee protection, the basement of the depot could be expected to receive water on the average of about every five years. Furthermore, flooding of the first floor could be expected about every ten years. The 100-year flood could subject an unprotected depot to several feet of inundation with associated velocities in excess of 10 feet per second. This scenario should be considered very hazardous and appropriate mitigation should be implemented. If the levee were to partially fail upstream of the depot, flood waters could access the Kelso-Cima road, and discharge would be contained between the remaining portion of the levee and the railroad grade, putting the depot in the direct path of the flood. Modeling results indicate that during this scenario, it would require only about 10–20 percent of the 100-year flood to reach the foundation of the depot. Associated velocities would likely exceed 5 feet per second, and should be considered hazardous.

In summary, flood hazard at the site of the Kelso Depot ranges from fairly frequent nuisance water to infrequent, but potentially devastating floods. Consequently, occupation of this site will require appropriate mitigation.

MITIGATION OF POTENTIAL FLOOD HAZARDS

Flood protection would be provided for the property by reinforcing and repairing the existing levee to contain the 100-year flood. This levee would have a height at least 9.3 feet above the channel bottom. This configuration would contain the predicted 100-year flood elevations and provide an average of 2 feet of freeboard. In addition to the design height, the levee would be armored at critical points with material large enough to withstand velocities of 12–13 feet per second. Other sections would be repaired and thickened with local material to increase the level of protection. A levee maintenance program would be established.

A warning and evacuation plan would also be implemented to protect human life in the case of extreme floods. Flood warning would occur by developing communication with the National Weather Service in the area and requesting that they notify the park during extreme storm events. In the case of an extreme storm, park visitors and employees would evacuate the Kelso Depot via the Kelso-Cima road.

SUMMARY

There are several factors that contribute to the need to protect and use the Kelso Depot. The Kelso depot is one of the significant cultural resources found within Mojave National Preserve and needs to be protected from potential threats. The depot's location along an active railroad line and a primary highway make it an ideal location from which to provide the public with information and interpretive services. Despite the continued threat of flooding, it is believed that the depot and human life can be protected by implementing a combination of proposed and other mitigating actions. The levee would be rebuilt and protected at sections where water flows have significantly cut into the levee. Other sections of the levee would be repaired as needed with fill material to increase or maintain the desired thickness and height of the levee. The storm channel located adjacent to the north side of the levee, would be improved and maintained to reduce the potential for impact on the base of the levee from small flows. The levee would be inspected on an annual or more frequent basis, depending upon the intensity and frequency of storms to determine appropriate maintenance work needed to maintain the levee. Using available technology, a communication link would be established with the National Weather Service to establish provide an early warning system for staff and visitors at the depot.

It is recognized that a threat to life and property exists as a result of the location of the depot within a flood plain, but that the threat can be mitigated by taking appropriate actions. It is proposed that the depot be occupied and used for visitor and NPS administrative functions, and that initial and continuing mitigating efforts be taken to protect life and property.

FIGURE B-1. KELSO DEPOT PROPOSED LANDSCAPE PLAN

color 11x17

Appendixes

back of figure B-1. Kelso Depot Proposed Landscape Plan

FIGURE B-2. KELSO DEPOT PROPOSED BASEMENT FLOOR PLAN

B&W 11x17

Appendixes

back of figure B-2. Kelso Depot Proposed Basement Floor Plan

FIGURE B-3. KELSO DEPOT PROPOSED FIRST FLOOR PLAN

B&W 11x17

Appendixes

back of figure B-3. Kelso Depot Proposed First Floor Plan

FIGURE B-4. KELSO DEPOT PROPOSED SECOND FLOOR PLAN

B&W 11x17

Appendixes

back of Figure B-4. Kelso Depot Proposed Second Floor Plan